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annual data 1980

COPPER • BRASS • BRONZE

copper supply & consumption

1960-1979

COPPER DEVELOPMENT ASSOCIATION INC.

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Preface

Original statistical data on the supply and consumption of copper and copper alloys in the United States are available from many governmental and private sources. In this report original data from these sources are brought together and rationalized by CDA and American Bureau of Metal Statistics Inc. to provide a set of data on copper supply and consumption that is both consistent and accurate in all aspects from mine to end-use market.

The main sources of information assembled here are the Bureau of Mines in the U.S. Department of the Interior, the Bureau of the Census and the Bureau of Industrial Economics in the U.S. Department of Commerce, and Copper Development Association Inc. Where data from different sources are conflicting, and where original data appear to be in error, the best judgment in CDA has been applied. General sources are shown in the tables throughout the report. Those interested to know the specific sources of any of the data should contact CDA.

The statistics are arranged in a logical sequence to trace the flow of copper in the U.S. economy from mining and scrap collection through smelting, refining and ingot making to the brass mills, wire mills, and foundries and then on to the final end-use markets. This flow is shown schematically on pages 4-5. On this schematic flowsheet the major statistics of copper supply and consumption in the United States for 1979 appear. Along with each major statistic on the chart, a reference is shown. This refer-

ence identifies the table in the report where details on that item, from 1960 through 1979, will be found. All data for 1979 are preliminary.

There are four major tables in the report. *Table 1* covers supply of primary copper. *Table 2* presents data on the supply of copper from secondary sources. In *Table 3*, statistics on the consumption of primary and secondary metals by mills, foundries and other industries are summarized. Finally, *Table 4* details the supply of mill, foundry and powder products and their consumption in the five end-use market areas.

The arrangement of the data in the report can be illustrated with an example. Consider *Mine Production*, the upper left-hand box in the flowsheet on page 4. As shown in the box, mine production of copper in the United States totalled 1,588.8 thousand short tons in 1979. Beneath this figure a number appears referring to *Table 1, Item 1*, abbreviated *1(1)*. This means that in *Table 1*, on line (1), mine production is shown for the full period 1960 through 1979. In *Table 1*, on line (1), a further reference will be found after the item heading *Mine Production*, directing the reader to page 8. This reference means that further details on mine production appear on page 8. In fact, on page 8, a table entitled *Table 1, Item 1* presents the data on mine production by state for 1960 through 1979. In this way all the data on supply and consumption appear in logical sequence proceeding through the report, eliminating the need for explanatory text.

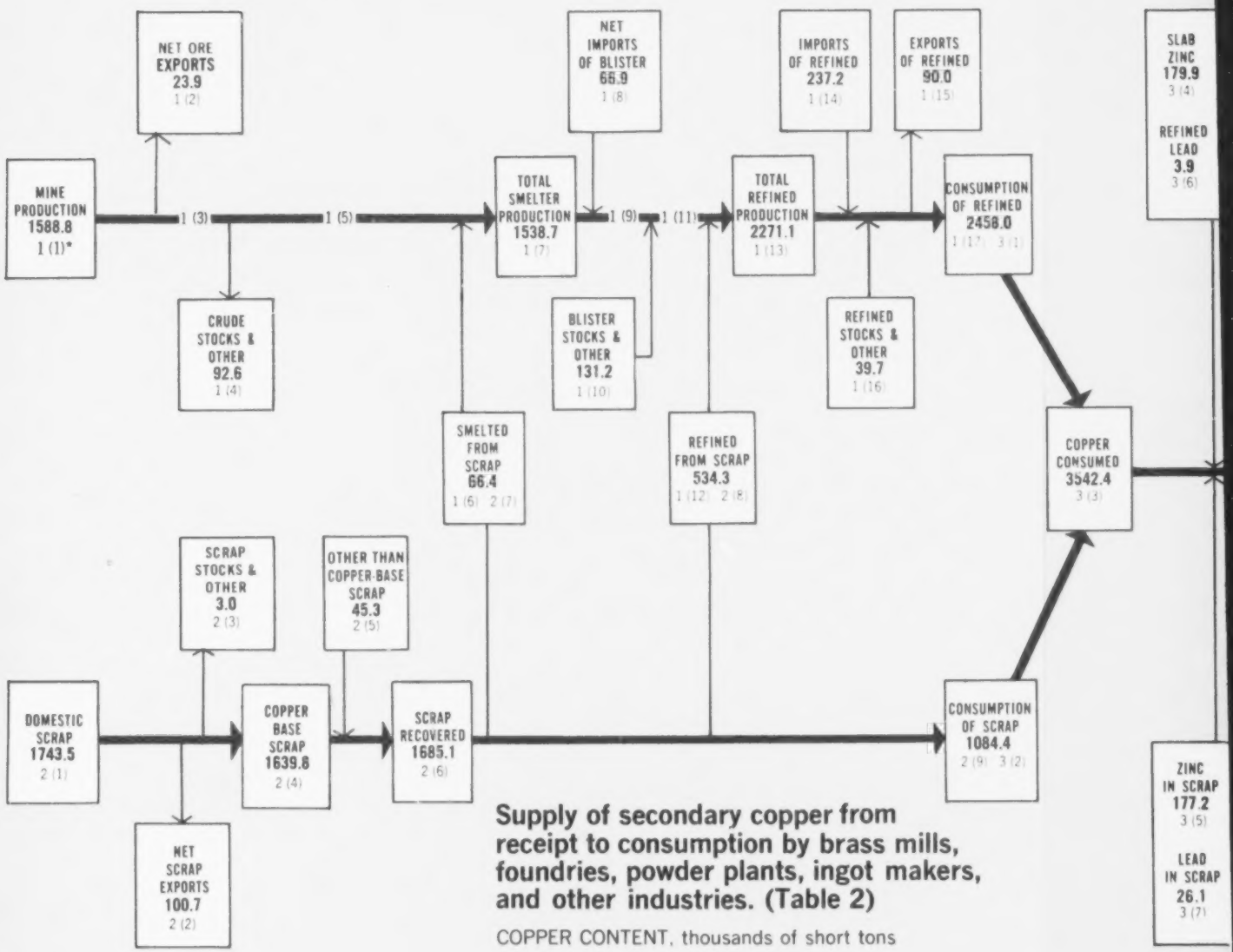
Contents

	Page
Preface	1
Copper supply and consumption – A schematic flow chart	4
Table 1. Supply of primary copper	6
Item 1. Mine production	8
Item 2. Imports and exports of ore	10
Item 8. Imports and exports of blister copper	10
Item 7. Smelter production	12
Item 10. Blister stocks and other	12
Item 16. Refined stocks and other	12
Item 13. Production of refined copper	14
Item 17. Consumption of refined copper	14
Table 2. Supply of secondary copper	16
Item 2. Imports and exports of scrap	18
Item 3. Scrap stocks and other	18
Item 6. Recovery from scrap	20
Item 9. Consumption of scrap	20
Table 3. Consumption of metals by mills, foundries and others	22
Item 3. Consumption of copper by mills, foundries and others	24
Items 4 to 11. Consumption of alloying metal by mills, foundries and others	26
Item 15. Net consumption of metals by mills, foundries and others	28
Table 4. Supply and consumption of mill, foundry and powder products	30
Item 5. Supply of brass mill products	32
Item 22. Imports and exports of mill and powder products	34

Copper supply and consumption in the United States 1979

Supply of primary copper from mine to consumption by brass mills, wire mills, foundries, powder plants, ingot makers and other industries. (Table 1)

COPPER CONTENT, thousands of short tons


NET ORE EXPORTS 23.9 1 (2)
NET IMPORTS OF BLISTER 66.9 1 (8)
IMPORTS OF REFINED 237.2 1 (14)
EXPORTS OF REFINED 90.0 1 (15)
SLAB ZINC 179.9 3 (4)
REFINED LEAD 3.9 3 (6)
MINE PRODUCTION 1588.8 1 (1)*
1 (3)
1 (5)
TOTAL SMELTER PRODUCTION 1538.7 1 (7)
1 (9)
1 (11)
TOTAL REFINED PRODUCTION 2271.1 1 (13)
CONSUMPTION OF REFINED 2458.0 1 (17) 3 (1)
CRUDE STOCKS & OTHER 92.6 1 (4)
BLISTER STOCKS & OTHER 131.2 1 (10)
REFINED STOCKS & OTHER 39.7 1 (16)
SMELTED FROM SCRAP 66.4 1 (6) 2 (7)
REFINED FROM SCRAP 534.3 1 (12) 2 (8)
COPPER CONSUMED 3542.4 3 (3)
SCRAP STOCKS & OTHER 3.0 2 (3)
OTHER THAN COPPER-BASE SCRAP 45.3 2 (5)
DOMESTIC SCRAP 1743.5 2 (1)
COPPER BASE SCRAP 1639.8 2 (4)
SCRAP RECOVERED 1685.1 2 (6)
CONSUMPTION OF SCRAP 1084.4 2 (9) 3 (2)
NET SCRAP EXPORTS 100.7 2 (2)
ZINC IN SCRAP 177.2 3 (5)
LEAD IN SCRAP 26.1 3 (7)

Supply of secondary copper from receipt to consumption by brass mills, foundries, powder plants, ingot makers, and other industries. (Table 2)

COPPER CONTENT, thousands of short tons

*1 (1) Refers to table and item in report where data for 1960 through 1979 appear

Consumption of metals by brass mills, wire mills, foundries, powder plants, ingot makers and other industries. (Table 3)

METAL WEIGHT, thousands of short tons

REFINED TIN 2.0 3 (8)
REFINED NICKEL 7.6 3 (10)
TIN IN SCRAP 13.9 3 (9)
NICKEL IN SCRAP 3.8 3 (11)
METAL CONSUMED 3956.8 3 (12)
INGOT MAKERS 249.4 3 (13)
INGOT STOCKS & OTHER 31.1 3 (14)
NET METAL CONSUMED 3925.7 3 (15)
OTHER INDUSTRIES 197.8 3 (16)
BRASS MILLS 1691.2 3 (17)
WIRE MILLS 1656.5 3 (20)
FOUNDRIES 341.9 3 (23)
POWDER PLANTS 38.3 3 (26)
METAL STOCKS & OTHER 162.7 3 (18)
METAL STOCKS & OTHER 71.5 3 (21)
METAL STOCKS & OTHER 45.9 3 (24)
METAL STOCKS & OTHER 5.3 3 (27)

Supply of mill, foundry, and powder products and their consumption in the end-use markets. (Table 4)

METAL WEIGHT, millions of pounds

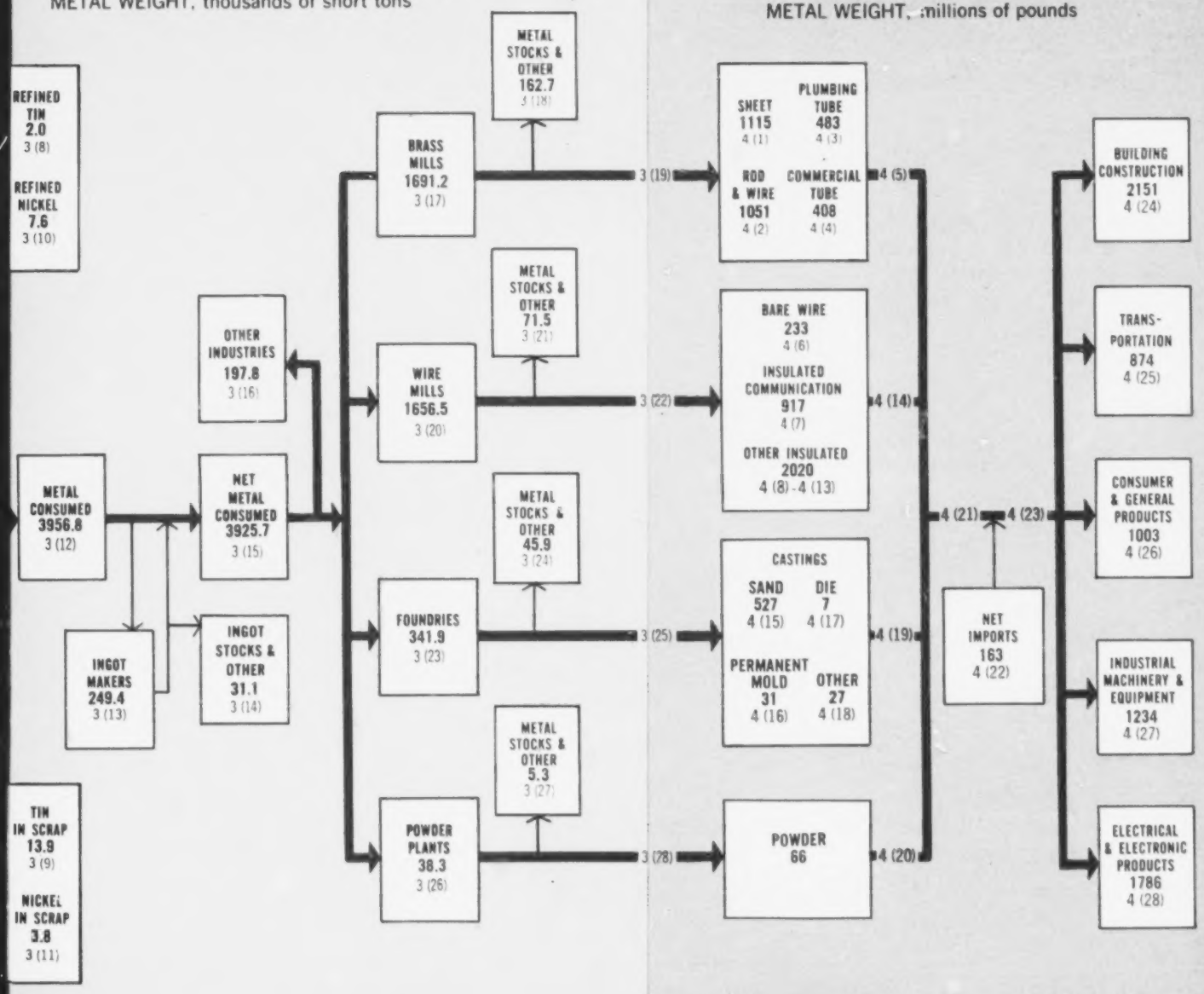


Table 1

The supply of primary copper in the United States from mine to consumption by brass mills, wire mills, foundries, powder plants, ingot makers, and other industries — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
(1) Mine Production (page 8)	1,080.2	1,165.2	1,228.4	1,213.2	1,246.8	1,351.7	1,429.2
(2) Net Ore Imports (page 10)	78.2	47.0	43.3	48.3	51.5	26.3	40.5
(3) Total Crude Primary	1,158.4	1,212.2	1,271.7	1,261.5	1,298.3	1,378.0	1,469.7
(4) Crude Stocks and Other	75.2	−4.9	−17.1	−3.6	−1.2	−11.1	−80.0
(5) Smelter Production From Primary	1,233.6	1,207.3	1,254.6	1,257.9	1,297.1	1,366.9	1,389.7
(6) Smelter Production From Scrap	74.5	78.4	86.9	98.0	88.4	93.9	114.6
(7) Total Smelter Production (page 12)	1,308.1	1,285.7	1,341.5	1,355.9	1,385.5	1,460.8	1,504.3
(8) Net Imports of Blister (page 10)	289.6	335.1	330.1	367.8	384.8	327.7	349.2
(9) Total Blister	1,597.7	1,620.8	1,671.6	1,723.7	1,770.3	1,788.5	1,853.5
(10) Blister Stocks and Other (page 12)	−4.3	7.8	27.1	−29.4	−25.6	17.2	−27.9
(11) Refined Production from Blister	1,593.4	1,628.6	1,698.7	1,694.3	1,744.7	1,805.7	1,825.6
(12) Refined Production from Scrap	201.2	185.3	185.8	190.1	245.7	335.1	357.7
(13) Total Refined Production (page 14)	1,794.6	1,813.9	1,884.5	1,884.4	1,990.4	2,140.8	2,183.3
(14) Imports of Refined	142.7	66.9	98.8	119.2	138.0	137.4	162.6
(15) Exports of Refined	−435.1	−436.0	−337.5	−312.6	−317.0	−330.9	−279.6
(16) Refined Stocks and Other (page 12)	−129.9	41.2	−37.7	61.7	51.2	85.7	310.0
(17) Consumption of Refined (page 14)	1,372.3	1,486.0	1,608.1	1,752.7	1,862.6	2,033.0	2,376.3

COPPER CONTENT, thousands of short tons												
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
954.1	1,204.6	1,544.6	1,719.7	1,522.2	1,664.8	1,717.9	1,597.0	1,413.4	1,605.6	1,504.0	1,496.5	1,588.8
−5.7	−37.4	37.9	−27.7	23.1	35.4	19.4	36.7	65.7	74.8	42.2	13.9	−23.9
948.4	1,167.2	1,582.5	1,692.0	1,545.3	1,700.2	1,737.3	1,633.7	1,479.1	1,680.4	1,546.2	1,510.4	1,564.9
−86.1	99.3	3.0	−50.7	−45.3	−9.8	6.7	−63.8	−32.0	−145.7	−111.0	−90.2	−92.6
862.3	1,266.5	1,585.5	1,641.3	1,500.0	1,690.4	1,744.0	1,569.9	1,447.1	1,534.7	1,435.2	1,420.2	1,472.3
70.7	84.8	77.3	78.9	66.3	69.0	77.8	79.5	49.4	51.0	49.4	59.8	66.4
933.0	1,351.3	1,662.8	1,720.2	1,566.3	1,759.4	1,821.8	1,649.4	1,496.5	1,585.7	1,484.6	1,480.0	1,538.7
248.3	255.0	233.6	216.6	128.0	148.9	146.6	205.1	87.4	41.1	28.3	70.0	66.9
1,181.3	1,606.3	1,896.4	1,936.8	1,694.3	1,908.3	1,968.4	1,854.5	1,583.9	1,626.8	1,512.9	1,550.0	1,605.6
22.4	−84.1	−76.3	−92.8	−36.2	33.9	−22.1	−120.3	−91.1	−36.5	32.7	107.1	131.2
1,203.7	1,522.2	1,820.1	1,844.0	1,658.1	1,942.2	1,946.3	1,734.2	1,492.8	1,590.3	1,545.6	1,657.1	1,736.8
322.9	316.8	394.8	398.7	304.3	316.3	366.3	404.4	282.1	300.2	303.0	444.3	534.3
1,526.6	1,839.0	2,214.9	2,242.7	1,962.4	2,258.5	2,312.6	2,138.6	1,774.9	1,890.5	1,848.6	2,101.4	2,271.1
330.3	400.3	131.2	132.1	164.0	192.4	199.9	303.9	146.0	380.7	390.8	455.8	237.2
−161.6	−251.0	−215.0	−222.0	−187.7	−182.7	−191.1	−126.7	−172.4	−114.6	−63.0	−113.1	−90.0
288.3	−109.9	19.1	−102.3	82.3	−30.6	126.9	−116.8	−209.1	−163.7	12.7	−27.0	39.7
1,983.6	1,878.4	2,150.2	2,050.5	2,021.0	2,237.6	2,448.3	2,199.0	1,539.4	1,992.9	2,189.1	2,417.1	2,458.0

Sources: U.S. Department of the Interior, Bureau of Mines;
U.S. Department of Commerce, Bureau of Industrial Economics
(a) Preliminary.

Table 1, Item 1.

Mine production of recoverable copper in the United States – 1960-1979

	1960	1961	1962	1963	1964	1965	1966	1967	1968
Arizona	538,605	587,053	644,242	660,977	690,988	703,377	739,569	501,741	627,961
California	1,087	1,382	1,162	916	1,035	1,165	1,078	788	1,182
Colorado	3,247	4,141	4,534	4,169	4,653	3,828	4,237	3,993	3,451
Idaho	4,208	4,328	3,861	4,172	4,666	5,140	4,961	4,210	3,525
Michigan	56,385	70,245	74,099	75,262	69,040	71,749	73,449	58,458	74,805
Missouri	1,087	1,479	2,752	1,816	2,059	2,331	3,913	3,215	5,494
Montana	91,972	104,000	94,021	79,762	103,806	115,489	128,061	65,483	69,480
Nevada	77,485	78,022	82,602	81,738	67,272	71,332	78,720	50,771	77,213
New Mexico	67,288	79,606	82,683	83,037	86,104	98,658	108,614	75,008	90,769
Pennsylvania	7,907[c]	8,934	6,108	4,434	3,614	4,354	3,178	4,401	4,850
Tennessee	12,723	12,272	14,298	13,717	13,889	14,823	15,410	14,600	14,196
Utah	218,049	213,534	218,018	203,095	199,588	259,138	265,383	168,609	228,245
Washington	78	66	41	70[c]	35	30	34	21	22
Other States	48	93	–	1	31	320	2,545	2,766	3,428
Total	1,080,169	1,165,155	1,228,421	1,213,166	1,246,780	1,351,734	1,429,152	954,064	1,204,621

Mine production of recoverable copper in the World

	COPPER CONTENT, thousands of short tons									
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
Australia	173.9	195.4	204.8	242.8	277.0	241.3	240.8	244.2	241.7	252.8
Canada	672.7	721.5	793.3	908.2	905.4	808.9	805.7	837.1	726.8	709.6
Chile	755.7	780.8	790.1	810.6	994.4	913.0	1,108.0	1,164.2	1,141.4	1,173.9
Japan	131.7	133.4	123.6	100.6	90.5	93.3	90.0	89.7	80.9	66.1
Papua New Guinea	—	—	136.7	201.6	202.9	190.1	194.6	200.9	218.9	188.3
Peru	226.5	228.6	241.5	223.4	233.2	199.5	242.8	375.9	403.9	438.7
Philippine Republic	176.7	217.6	235.6	243.8	248.6	274.4	289.3	331.5	320.0	327.4
Poland	91.5	134.7	148.8	167.6	203.9	253.5	294.3	318.9	350.5	352.7
Russia (U.S.S.R.)	1,019.6	1,091.3	1,135.4	1,168.4	1,168.4	1,212.5	1,245.5	1,212.5	1,256.6	1,256.6
South African Republic	159.0	163.6	178.5	193.8	197.4	197.2	217.0	226.4	230.7	214.3
United States	1,719.7	1,522.2	1,664.8	1,717.9	1,597.0	1,413.4	1,605.6	1,504.0	1,496.5	1,588.8
Zaire	426.7	447.3	482.0	538.6	550.8	545.4	489.9	530.9	467.2	441.3
Zambia	754.1	718.0	791.1	778.9	769.4	746.1	781.4	723.1	708.8	648.5
Other Countries	685.9	746.4	832.7	973.1	1,013.8	997.4	1,053.6	1,037.8	1,034.8	1,021.0
Total	6,993.7	7,100.8	7,758.9	8,269.3	8,452.7	8,086.0	8,658.5	8,797.1	8,678.7	8,680.0

Sources: United States U.S. Department of the Interior, Bureau of Mines
Other Countries — World Bureau of Metal Statistics
(a) Preliminary

COPPER CONTENT, short tons										
1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
801,363	917,918	820,171	908,612	927,271	858,783	813,211	1,024,421	923,778	982,606	1,042,736
1,129	2,308	515	598	369	194	344	375	221	(b)	(b)
3,598	3,749	3,938	3,944	3,123	3,012	3,560	2,431	1,896	1,313	417
3,332	3,612	3,776	2,942	3,625	2,841	3,192	3,362	4,052	4,286	3,966
75,226	67,543	56,005	67,260	72,221	67,012	73,690	43,707	42,375	38,380	(b)
12,664	12,134	8,445	11,509	10,273	12,665	14,258	11,050	11,737	11,925	14,877
103,314	120,412	88,581	123,110	132,466	131,131	87,959	91,111	86,203	74,214	77,081
104,924	106,688	96,928	101,119	93,702	84,101	81,210	58,160	67,061	22,546	12
119,956	166,278	157,419	168,034	204,742	196,585	146,263	172,360	164,698	140,906	183,492
3,382	2,539	3,349	2,611	1,845	—	—	—	—	—	—
15,353	15,535	13,916	11,310	8,500	6,304	10,041	11,131	6,187	12,444	11,873
296,699	295,738	263,451	259,507	256,589	230,593	177,155	185,458	194,130	205,393	209,212
18	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
3,621	5,203	5,689	4,284	3,214	3,781	2,483	2,020	1,628	2,469	45,114
1,544,579	1,719,657	1,522,183	1,664,840	1,717,940	1,597,002	1,413,366	1,605,586	1,503,966	1,496,482	1,588,780

Source: U. S. Department of the Interior, Bureau of Mines

(a) Preliminary.

(b) Included in other States

(c) Includes North Carolina to avoid disclosing operation of individual companies.

Table 1, Item 2.

Imports and exports of copper ore in the United States — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
Net Ore Imports (Ore, Concentrate, Matte)	78,247	47,040	43,251	48,322	51,469	26,257	40,528
Imports (Ore, Concentrate, Matte)	80,567	47,394	43,552	48,408	52,038	36,933	41,942
Exports (Ore, Concentrate, Matte)	2,320	354	301	86	569	10,676	1,414

Table 1, Item 8.

Imports and exports of blister copper in the United States — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
Net Imports of Blister	289,582	335,088	330,069	367,861	384,751	327,724	349,181
Imports of Blister	298,373	339,212	331,684	368,985	389,577	332,558	349,917
Exports of Blister	8,791	4,124	1,615	1,124	4,826	4,834	736

COPPER CONTENT, short tons												
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
−5,740	−37,431	37,871	−27,697	23,100	35,446	19,373	36,725	65,666	74,772	42,157	13,875	−23,930
32,971	27,559	39,048	33,841	31,288	55,020	42,881	56,045	73,971	89,624	57,977	33,149	25,194
38,711	64,990	1,177	61,538	8,188	19,574	23,508	19,320	8,305	14,852	15,820	19,274	49,124

Source: U. S. Department of Commerce, Bureau of the Census

(a) Preliminary

COPPER CONTENT, short tons												
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
248,341	254,969	233,609	216,611	128,042	148,861	146,625	205,098	87,405	41,100	28,298	69,962	66,888
269,322	270,718	237,949	224,416	156,744	157,430	154,104	207,761	88,951	43,828	44,698	81,407	75,107
20,981	15,749	4,340	7,805	28,702	8,569	7,479	2,663	1,546	2,728	16,400	11,445	8,219

Source: U. S. Department of Commerce, Bureau of the Census

(a) Preliminary

Table 1, Item 7.

Smelter production of copper in the United States — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
Total Smelter Production of Copper	1,308.1	1,285.7	1,341.5	1,355.9	1,385.5	1,460.8	1,504.3
from Domestic Ore[(b)] (Table 1, Item 5)	1,142.8	1,162.4	1,214.1	1,219.3	1,259.8	1,335.7	1,353.1
from Foreign Ore (Table 1, Item 5)	90.8	44.9	40.5	38.6	37.3	31.2	36.6
from Scrap (Table 1, Item 6)	74.5	78.4	86.9	98.0	88.4	93.9	114.6

Table 1, Item 10.

Blister stocks and other — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
End of Year	261.0	236.0	246.0	252.0	246.0	246.0	270.0
Net Change	8.0	−25.0	10.0	6.0	−6.0	—	24.0
Apparent Change	4.3	−7.8	−27.1	29.4	25.6	−17.2	27.9

Table 1, Item 16.

Refined stocks and other — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
Refineries	136.5	71.2	113.4	75.2	42.5	50.4	61.6
Wire Mills	58.0	54.0	61.0	39.0	49.0	53.0	80.0
Brass Mills	39.0	45.0	39.0	39.0	56.0	55.0	84.0
Other Processors	4.0	4.0	4.0	5.0	5.0	5.0	10.0
Government[(b)]	1,071.0	1,066.0	1,058.6	1,047.2	1,019.9	897.4	452.4
Commodity Exchange	2.8	8.6	4.0	1.7	3.1	10.4	4.1
End of Year Total	1,311.3	1,248.8	1,280.0	1,207.1	1,175.5	1,071.2	692.1
Net Change	100.5	−62.5	31.2	−72.9	−31.6	−104.3	−379.1
Apparent Change	129.9	−41.2	37.7	−61.7	−51.2	−85.7	−310.0

COPPER CONTENT, thousands of short tons

1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
933.0	1,351.3	1,662.8	1,720.2	1,566.3	1,759.4	1,821.8	1,649.4	1,496.5	1,585.7	1,484.6	1,480.0	1,538.7
841.3	1,234.7	1,547.5	1,605.2	1,470.8	1,649.1	1,705.1	1,532.1	1,374.3	1,461.3	1,394.4	1,399.9	1,447.6
21.0	31.8	38.0	36.1	29.2	41.3	38.9	37.8	72.8	73.4	40.8	20.3	24.7
70.7	84.8	77.3	78.9	66.3	69.0	77.8	79.5	49.4	51.0	49.4	59.8	66.4

Sources: U. S. Department of the Interior, Bureau of Mines; CDA.

(a) Preliminary.

(b) For the years 1962 through 1966, CDA used figures for refined production from domestic ores instead of smelter production from domestic ores.

COPPER CONTENT, thousands of short tons

1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
220.0	272.0	291.0	340.7	303.0	282.0	265.0	324.0	312.0	321.0	346.0	290.0	303.0
−50.0	52.0	19.0	49.0	−37.0	−21.0	−17.0	59.0	−12.0	9.0	25.0	−56.0	13.0
−22.4	84.1	76.3	92.8	36.2	−33.9	22.1	120.3	91.1	36.5	−32.7	−107.1	−131.2

Sources: U. S. Department of the Interior, Bureau of Mines; CDA.

(a) Preliminary.

COPPER CONTENT, thousands of short tons

1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
41.7	44.9	41.9	142.7	82.7	99.6	43.2	151.6	260.7	272.8	286.7	188.3	78.4
47.0	54.0	63.0	134.0	120.0	75.0	61.0	131.0	140.0	133.0	136.0	85.0	68.0
51.0	57.0	56.0	49.0	50.0	35.0	43.0	42.0	33.0	39.0	37.0	31.0	31.0
5.0	4.0	6.0	4.0	4.0	4.0	4.0	6.0	4.0	5.0	5.0	4.0	4.0
275.2	261.4	253.4	253.4	251.6	226.6	217.8	35.3	26.2	42.1	21.7	22.9	22.9
13.7	11.7	4.0	17.9	20.3	57.8	5.9	43.3	100.0	201.0	184.4	179.6	107.4
433.6	433.0	424.3	601.0	528.6	498.0	374.9	409.2	563.9	692.9	670.8	510.8	311.7
−258.5	−0.6	−8.7	176.7	−72.4	−30.6	−123.1	34.3	154.7	129.0	−22.1	−160.0	−199.1
−288.3	109.9	−19.1	102.3	−82.3	30.6	−126.9	116.8	209.1	163.7	−12.7	27.0	−39.7

U.S. Department of Commerce, Bureau of Industrial Economics
(a) Preliminary.

(b) Includes small amount of wire rod.

Table 1, Item 13.

Production of refined copper in the United States — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
Total Production of Refined Copper	1,794.6	1,813.9	1,884.5	1,884.4	1,990.4	2,140.8	2,183.3
From Primary Sources (Table 1, Items 1, 2, 4, 8, 10)	1,518.9	1,550.2	1,611.8	1,596.3	1,656.3	1,711.8	1711.0
From Scrap at Smelters (Table 1, Item 6)	74.5	78.4	86.9	98.0	88.4	93.9	114.6
From Scrap at Refiners (Table 1, Item 12)	201.2	185.3	185.8	190.1	245.7	335.1	357.7

Table 1, Item 17.

Consumption of refined copper in the United States — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
Total	1,372.3	1,486.0	1,608.1	1,752.7	1,862.6	2,033.0	2,376.3
Brass Mills	498.2	613.7	633.2	689.4	711.1	766.2	939.7
Wire Mills	841.0	835.0	935.0	1,027.0	1,111.0	1,228.0	1,376.0
Foundries	15.0	15.5	18.7	15.7	19.2	16.0	21.4
Powder Plants	6.2	7.2	7.4	8.1	7.8	9.4	13.1
Ingot Makers	2.7	3.3	3.3	3.3	3.5	4.4	17.7
Other Industries[b]	9.2	11.3	10.5	9.2	10.0	9.0	8.4

COPPER CONTENT, thousands of short tons												
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
1,526.6	1,839.0	2,214.9	2,242.7	1,962.4	2,258.5	2,312.6	2,138.6	1,774.9	1,890.5	1,848.6	2,101.4	2,271.1
1,133.0	1,437.4	1,742.8	1,765.1	1,591.8	1,873.2	1,868.5	1,654.7	1,443.4	1,539.3	1,496.2	1,597.3	1,670.4
70.7	84.8	77.3	78.9	66.3	69.0	77.8	79.5	49.4	51.0	49.4	59.8	66.4
322.9	316.8	394.8	398.7	304.3	316.3	366.3	404.4	282.1	300.2	303.0	444.3	534.3

Sources: U. S. Department of the Interior, Bureau of Mines
U. S. Department of Commerce, Bureau of the Census
(a) Preliminary

COPPER CONTENT, thousands of short tons												
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
1,983.6	1,878.4	2,150.2	2,050.5	2,021.0	2,237.6	2,448.3	2,199.0	1,539.4	1,992.9	2,189.1	2,417.1	2,458.0
658.9	653.6	799.1	660.6	655.8	667.2	714.4	670.2	439.0	584.8	628.6	682.6	741.0
1,274.0	1,186.0	1,295.0	1,338.7	1,324.9	1,526.3	1,672.3	1,474.3	1,061.3	1,364.0	1,511.2	1,672.7	1,656.5
22.2	14.9	23.8	23.7	17.5	17.9	30.6	28.7	21.7	21.0	22.5	22.1	23.0
6.5	7.7	9.8	6.5	7.2	9.5	12.7	12.0	6.8	11.8	11.3	11.5	12.0
8.6	5.7	6.7	6.8	4.5	6.0	6.1	4.7	1.6	2.9	2.5	4.0	4.2
13.4	10.5	15.8	14.2	11.1	10.7	12.2	9.1	9.0	8.4	13.0	24.2	21.3

Sources: U. S. Department of the Interior, Bureau of Mines; CDA
(a) Preliminary.
(b) Chemical, Steel, Aluminum, and Other Industries.

Table 2

The supply of secondary copper in the United States from receipt to consumption by brass mills, foundries, powder plants, ingot makers, and other industries — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
(1) Receipts of Domestic Scrap	1,098.5	1,031.5	1,063.7	1,123.5	1,309.4	1,438.4	1,468.5
(2) Net Exports of Scrap (page 18)	−145.6	−111.4	−31.1	−35.0	−88.7	−62.6	−18.1
(3) Scrap Stocks and Other (page 18)	21.0	17.0	−20.0	−1.0	11.0	−2.0	−5.0
(4) Recovery From Copper Scrap (page 20)	973.9	937.1	1,012.6	1,087.5	1,231.7	1,373.8	1,445.4
(5) Recovery From Other Scrap (page 20)	8.8	10.6	13.1	13.6	14.4	16.2	16.9
(6) Total Scrap Recovery (page 20)	982.7	947.7	1,025.7	1,101.1	1,246.1	1,390.0	1,462.3
(7) Smelter Production From Scrap	−74.5	−78.4	−86.9	−98.0	−88.4	−93.9	−114.6
(8) Refined Production From Scrap	−201.2	−185.3	−185.8	−190.1	−245.7	−335.1	−357.7
(9) Consumption of Scrap (page 20)	707.0	684.0	753.0	813.0	912.0	961.0	990.0

COPPER CONTENT, thousands of short tons

1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
1,309.3	1,368.2	1,552.8	1,447.6	1,334.9	1,440.8	1,560.9	1,504.3	1,113.0	1,273.8	1,319.6	1,519.6	1,743.5
−45.1	−76.6	−46.9	−79.0	−50.7	−39.2	−81.4	−70.5	−84.3	−54.1	−58.5	−95.9	−100.7
−18.0	32.0	−15.0	−13.0	17.0	7.0	−2.0	−3.0	5.0	−19.0	−13.0	16.0	−3.0
1,246.2	1,323.6	1,490.9	1,355.6	1,301.2	1,408.6	1,477.5	1,430.8	1,033.7	1,200.7	1,248.1	1,439.7	1,639.8
16.4	16.0	19.0	16.8	17.0	19.7	21.1	21.1	28.1	35.7	37.9	39.8	45.3
1,262.6	1,339.6	1,509.9	1,372.4	1,318.2	1,428.3	1,498.6	1,451.9	1,061.8	1,236.4	1,286.0	1,479.5	1,685.1
−70.7	−84.8	−77.3	−78.9	−66.3	−69.0	−77.8	−79.5	−49.4	−51.0	−49.4	−59.8	−66.4
−322.9	−316.8	−394.8	−398.7	−304.3	−316.3	−366.3	−404.4	−282.1	−300.2	−303.0	−444.3	−534.3
869.0	938.0	1,037.8	894.8	947.6	1,043.0	1,054.5	968.0	730.3	885.2	933.6	975.4	1,084.4

Sources: U.S. Department of Commerce, Bureau of Industrial Economics; CDA

(a) Preliminary.

Table 2, Item 2.

Imports and exports of copper and copper alloy scrap in the United States — **1960-1979**

	1960	1961	1962	1963	1964	1965	1966
Net Exports	145.6	111.4	31.1	35.0	88.7	62.6	18.1
Imports	4.3	6.0	7.2	4.0	5.2	16.8	31.7
Exports	149.9	117.4	38.3	39.0	93.9	79.4	49.8

Table 2, Item 3.

Scrap stocks and other — **1960-1979**

	1960	1961	1962	1963	1964	1965	1966
Secondary Smelters	20	20	20	21	22	21	23
Primary Producers	42	23	39	26	31	28	29
Brass Mills	33	34	36	47	30	39	44
Foundries	11	13	14	15	14	11	8
Other Processors	3	2	3	4	5	5	5
End of Year Total	109	92	112	113	102	104	109
Net and Apparent Change	−21	−17	20	1	−11	2	5

COPPER CONTENT, thousands of short tons												
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
45.1	76.6	46.9	79.0	50.7	39.2	81.4	70.5	84.3	54.1	58.5	95.9	100.7
11.4	12.5	7.7	3.8	13.8	18.8	27.1	41.7	20.2	29.4	28.6	28.8	32.0
56.5	89.1	54.6	82.8	64.5	58.0	108.5	112.2	104.5	83.5	87.1	124.7	132.7

Source: U.S. Department of Commerce, Bureau of the Census

(a) Preliminary

COPPER CONTENT, thousands of short tons												
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
26	22	21	19	24	22	23	24	27	28	34	30	32
22	20	36	49	27	24	19	18	12	25	27	27	28
61	39	39	43	37	36	44	45	46	48	55	44	45
13	10	10	8	14	13	11	13	11	13	12	11	10
5	4	4	4	4	4	4	4	3	4	3	3	3
127	95	110	123	106	99	101	104	99	118	131	115	118
18	−32	15	13	−17	−7	2	3	−5	19	13	−16	3

Sources: U.S. Department of Commerce, Bureau of Industrial Economics; CDA

(a) Preliminary.

Table 2, Item 6.

Recovery of copper from scrap — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
Recovery of Copper from Scrap							
New	494.3	471.2	540.1	589.7	675.3	775.7	828.4
Old	488.4	476.5	485.6	511.4	570.8	614.3	633.9
Total	982.7	947.7	1,025.7	1,101.1	1,246.1	1,390.0	1,462.3
Recovery of Copper from Copper-Base Scrap (Table 2, Item 4)							
New	488.6	465.3	532.2	581.5	666.1	765.9	818.3
Old	485.3	471.8	480.4	506.0	565.6	607.9	627.1
Total	973.9	937.1	1,012.6	1,087.5	1,231.7	1,373.8	1,445.4
Recovery of Copper from Scrap Other than Copper-Base Scrap (Table 2, Item 5)							
New	5.7	5.9	7.9	8.2	9.2	9.8	10.1
Old	3.1	4.7	5.2	5.4	5.2	6.4	6.8
Total	8.8	10.6	13.1	13.6	14.4	16.2	16.9

Table 2, Item 9.

Consumption of copper scrap in the United States — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
Total	707.0	684.0	753.0	813.0	912.0	961.0	990.0
Brass Mills	320.2	294.7	345.6	374.3	438.5	465.9	485.7
Foundries	125.5	112.6	121.4	138.6	145.5	148.9	144.0
Powder Plants	10.2	10.3	12.3	12.6	16.1	15.9	15.3
Ingot Makers	225.9	227.0	233.3	248.2	266.8	283.4	293.0
Other Industries[(b)]	25.2	39.4	40.4	39.3	45.1	46.9	52.0

COPPER CONTENT, thousands of short tons

1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
683.9	730.6	817.8	745.7	763.2	867.4	916.2	878.2	611.0	737.7	750.6	853.2	1,023.1
578.7	609.0	692.1	626.7	555.0	560.9	582.4	573.7	450.8	498.7	535.4	626.3	662.0
1,262.6	1,339.6	1,509.9	1,372.4	1,318.2	1,428.3	1,498.6	1,451.9	1,061.8	1,236.4	1,286.0	1,479.5	1,685.1
673.7	719.9	804.9	734.2	752.5	854.4	901.9	864.2	593.6	717.0	728.7	830.3	997.0
572.5	603.7	686.0	621.4	548.7	554.2	575.6	566.6	440.1	483.7	519.4	609.4	642.8
1,246.2	1,323.6	1,490.9	1,355.6	1,301.2	1,408.6	1,477.5	1,430.8	1,033.7	1,200.7	1,248.1	1,439.7	1,639.8
10.2	10.7	12.9	11.5	10.7	13.0	14.3	14.0	17.4	20.7	21.9	22.9	26.1
6.2	5.3	6.1	5.3	6.3	6.7	6.8	7.1	10.7	15.0	16.0	16.9	19.2
16.4	16.0	19.0	16.8	17.0	19.7	21.1	21.1	28.1	35.7	37.9	39.8	45.3

Sources: U. S. Department of the Interior, Bureau of Mines; CDA

(a) Preliminary

COPPER CONTENT, thousands of short tons

1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
869.0	938.0	1,037.8	894.8	947.6	1,043.0	1,054.5	968.0	730.3	885.2	933.6	975.4	1,084.4
406.9	475.9	516.6	446.5	496.6	578.4	612.5	563.0	406.3	519.3	528.6	546.9	609.1
133.6	126.6	147.4	129.7	113.4	121.7	122.7	115.4	90.9	95.7	101.2	105.2	116.3
16.1	18.1	16.5	12.2	16.5	16.0	17.3	17.7	11.6	16.8	18.5	18.5	20.0
271.9	278.8	290.3	241.4	257.9	250.5	236.7	215.0	164.0	175.7	197.2	204.1	214.0
40.5	38.6	67.0	65.0	63.2	76.4	65.3	56.9	57.5	77.7	88.1	100.7	125.0

Sources: U.S. Department of Commerce, Bureau of Industrial Economics; CDA

(a) Preliminary

(b) Chemical, Steel, Aluminum and Other Industries.

Table 3

Consumption of metals in the United States by ingot makers, brass mills, wire mills, foundries, powder plants, and other industries — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
(1) Consumption of Refined Copper (page 14)	1,372.3	1,486.0	1,608.1	1,752.7	1,862.6	2,033.0	2,376.3
(2) Consumption of Scrap Copper (page 20)	707.0	684.0	753.0	813.0	912.0	961.0	990.0
(3) Total Copper Consumed (page 24)	2,079.3	2,170.0	2,361.1	2,565.7	2,774.6	2,994.0	3,366.3
(4) Consumption of Zinc-Slab (page 26)	99.0	128.6	129.8	128.3	135.1	126.9	185.6
(5) Consumption of Zinc in Scrap (page 26)	110.7	102.7	117.6	123.9	138.6	165.6	170.4
(6) Consumption of Lead—Refined (page 26)	2.0	2.9	3.1	3.0	3.0	3.5	3.9
(7) Consumption of Lead in Scrap (page 26)	28.3	27.6	27.7	31.5	33.8	34.4	35.6
(8) Consumption of Tin—Refined (page 26)	2.4	1.8	2.2	2.7	1.7	2.6	3.1
(9) Consumption of Tin in Scrap (page 26)	15.9	16.3	16.3	17.2	18.5	18.7	20.0
(10) Consumption of Nickel—Refined (page 26)	3.1	3.8	4.0	4.4	5.4	9.3	5.2
(11) Consumption of Nickel in Scrap (page 26)	1.9	2.1	1.9	2.4	3.0	4.0	7.4
(12) Total Metal Consumed	2342.6	2,455.8	2,663.7	2,879.1	3,113.7	3,359.0	3,797.5
(13) Converted to Ingot[b]	265.9	265.0	276.5	290.5	312.1	333.5	351.6
(14) Ingot Stocks and Other	−27.2	−29.0	−34.1	−30.7	−38.3	−34.7	−55.1
(15) Net Metal Consumed (page 28)	2,315.4	2,426.8	2,629.6	2,848.4	3,075.4	3,324.3	3,742.4
(16) Other Industries[c] (page 28)	60.3	78.5	66.4	77.5	79.6	83.0	103.5
(17) Brass Mills—Net Metal Consumed (page 28)	997.0	1,109.0	1,197.2	1,288.7	1,395.5	1,502.2	1,753.9
(18) —Metal Stocks and Other	−57.0	−76.5	−19.2	−56.7	−2.5	−13.7	−91.4
(19) —Metal Contained in Products Supplied	940.0	1,032.5	1,178.0	1,232.0	1,393.0	1,488.5	1,662.5
(20) Wire Mills—Net Metal Consumed (page 28)	841.0	835.0	935.0	1,027.0	1,111.0	1,228.0	1,376.0
(21) —Metal Stocks and Other	−81.0	−58.5	−117.0	−170.5	−115.5	−139.5	−129.0
(22) —Metal Contained in Products Supplied	760.0	776.5	818.0	856.5	995.5	1,088.5	1,247.0
(23) Foundries—Net Metal Consumed (page 28)	394.9	380.5	403.8	425.3	457.6	476.9	470.3
(24) —Metal Stocks and Other	−13.9	−13.5	−8.7	−12.1	−32.4	−15.3	
(25) —Metal Contained in Products Supplied	381.0	367.0	403.0	426.0	445.5	444.5	455.0
(26) Powder Plants—Net Metal Consumed (page 28)	22.2	23.8	27.2	29.9	31.7	34.2	38.7
(27) —Metal Stocks and Other	−2.7	−3.3	−3.2	−4.4	−3.2	−3.2	−5.2
(28) —Metal Contained in Products Supplied	19.5	20.5	24.0	25.5	28.5	31.0	33.5

COPPER CONTENT, thousands of short tons												
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
1,983.6	1,878.4	2,150.2	2,050.5	2,021.0	2,237.6	2,448.3	2,199.0	1,539.4	1,992.9	2,189.1	2,417.1	2,458.0
869.0	938.0	1,037.8	894.8	947.6	1,043.0	1,054.5	968.0	730.3	885.2	933.6	975.4	1,084.4
2,852.6	2,816.4	3,188.0	2,945.3	2,968.6	3,280.6	3,502.8	3,167.0	2,269.7	2,878.1	3,122.7	3,392.5	3,542.4
METAL WEIGHT, thousands of short tons												
130.3	162.0	179.5	127.7	150.4	192.0	197.6	181.5	115.3	166.2	168.9	176.0	179.9
144.4	165.1	196.8	160.4	165.9	195.0	183.4	165.7	119.4	156.9	159.9	171.8	177.2
2.3	2.8	3.7	2.5	3.1	3.8	4.9	4.1	2.0	3.5	3.3	3.7	3.9
28.6	28.9	30.0	24.9	22.5	22.3	23.9	24.0	17.7	22.5	26.7	26.4	26.1
2.6	2.8	2.8	2.2	2.2	2.0	2.3	2.1	1.2	1.8	1.7	1.8	2.0
17.1	16.5	16.6	13.7	13.0	20.6	14.0	14.1	10.5	12.6	15.0	14.5	13.9
3.6	3.4	5.9	5.1	6.1	6.5	5.4	7.1	7.5	5.5	4.6	4.8	7.6
7.2	3.2	4.2	5.2	5.4	4.7	11.8	4.9	4.5	4.2	3.5	2.6	3.8
3,188.7	3,201.1	3,627.5	3,287.0	3,337.2	3,727.5	3,946.1	3,570.5	2,547.8	3,251.3	3,506.3	3,794.1	3,956.8
311.9	321.3	326.2	256.0	268.2	279.9	284.5	261.6	188.2	228.7	257.6	262.6	249.4
−31.6	−37.8	−43.6	−55.9	−56.6	−32.1	−10.9	−2.7	−21.8	−5.3	−12.3	−15.4	−31.1
3,157.1	3,163.3	3,583.9	3,231.1	3,280.6	3,695.4	3,935.2	3,567.8	2,526.0	3,246.0	3,494.0	3,778.7	3,925.7
116.8	96.4	125.5	113.3	110.3	125.1	116.5	99.0	99.7	140.9	158.6	167.3	197.8
1,312.8	1,421.2	1,657.3	1,371.4	1,448.5	1,615.4	1,700.2	1,577.6	1,067.2	1,407.3	1,461.3	1,554.8	1,691.2
−14.8	−43.2	−102.3	−114.9	−94.0	−107.4	−41.7	−163.1	−27.7	−103.8	−83.3	−100.3	−162.7
1,298.0	1,378.0	1,555.0	1,256.5	1,354.5	1,508.0	1,658.5	1,414.5	1,039.5	1,303.5	1,378.0	1,454.5	1,528.5
1,274.0	1,186.0	1,295.0	1,338.7	1,324.9	1,526.3	1,672.3	1,474.3	1,061.3	1,364.0	1,511.2	1,672.7	1,656.5
−96.0	−79.5	−33.0	−127.2	−80.9	−176.3	−213.3	−151.8	−29.8	−165.5	−83.7	−134.2	−71.5
1,178.0	1,106.5	1,262.0	1,211.5	1,244.0	1,350.0	1,459.0	1,322.5	1,031.5	1,198.5	1,427.5	1,538.5	1,585.0
419.4	422.6	468.1	378.0	364.6	394.0	404.9	380.3	276.0	299.4	326.2	346.2	341.9
−19.9	−27.1	−41.6	−2.5	−12.1	−12.5	−14.9	−44.8	−16.0	−24.9	−36.2	−62.7	−45.9
399.5	395.5	426.5	375.5	352.5	381.5	390.0	335.5	260.0	274.5	290.0	283.5	296.0
34.1	37.1	38.0	29.7	32.3	34.6	41.3	36.6	21.8	34.4	36.7	37.7	38.3
−6.1	−6.1	−7.5	−6.2	−6.3	−7.6	−9.3	−2.1	+1.2	−1.9	−5.2	−5.2	−5.3
28.0	31.0	30.5	23.5	26.0	27.0	32.0	34.5	23.0	32.5	31.5	32.5	33.0

Sources: U.S. Department of the Interior, Bureau of Mines; U.S. Department of Commerce, Bureau of Industrial Development; CDA

(a) Preliminary.

(b) Ingot Makers consume refined copper, scrap copper, and alloying metal and ship copper alloy ingots to brass mills, foundries, powder plants, and other industries.

(c) Chemical, Steel, Aluminum and Other Industries.

Table 3, Item 3.

Consumption of copper by ingot makers, brass mills, wire mills, foundries, powder plants and other industries — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
Copper Consumed							
Refined (Table 1, Item 17)	1,372.3	1,486.0	1,608.1	1,752.7	1,862.6	2,033.0	2,376.3
Scrap (Table 2, Item 9)	707.0	684.0	753.0	813.0	912.0	961.0	990.0
Total (Table 3, Item 3)	2,079.3	2,170.0	2,361.1	2,565.7	2,774.6	2,994.0	3,366.3
Ingot Makers[b]							
Refined	2.7	3.3	3.3	3.3	3.5	4.4	17.7
Scrap	225.9	227.0	233.3	248.2	266.8	283.4	293.0
Total	228.6	230.3	236.6	251.5	270.3	287.8	310.7
Brass Mills							
Refined	498.2	613.7	633.2	689.4	711.1	766.2	939.7
Scrap	320.2	294.7	345.6	374.3	438.5	465.9	485.7
Total	818.4	908.4	978.8	1,063.7	1,149.6	1,232.1	1,425.4
Wire Mills[c]							
Refined	841.0	835.0	935.0	1,027.0	1,111.0	1,228.0	1,376.0
Foundries							
Refined	15.0	15.5	18.7	15.7	19.2	16.0	21.4
Scrap	125.5	112.6	121.4	138.6	145.5	148.9	144.0
Total	140.5	128.1	140.1	154.3	164.7	164.9	165.4
Powder Plants							
Refined	6.2	7.2	7.4	8.1	7.8	9.4	13.1
Scrap	10.2	10.3	12.3	12.6	16.1	15.9	15.3
Total	16.4	17.5	19.7	20.7	23.9	25.3	28.4
Other Industries[d]							
Refined	9.2	11.3	10.5	9.2	10.0	9.0	8.4
Scrap	25.2	39.4	40.4	39.3	45.1	46.9	52.0
Total	34.4	50.7	50.9	48.5	55.1	55.9	60.4

COPPER CONTENT, thousands of short tons												
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
1,983.6	1,878.4	2,150.2	2,050.5	2,021.0	2,237.6	2,448.3	2,199.0	1,539.4	1,992.9	2,189.1	2,417.1	2,458.0
869.0	938.0	1,037.8	894.8	947.6	1,043.0	1,054.5	968.0	730.3	885.2	933.6	975.4	1,084.4
2,852.6	2,816.4	3,188.0	2,945.3	2,968.6	3,280.6	3,502.8	3,167.0	2,269.7	2,878.1	3,122.7	3,392.5	3,542.4
8.6	5.7	6.7	6.8	4.5	6.0	6.1	4.7	1.6	2.9	2.5	4.0	4.2
271.9	278.8	290.3	241.4	257.9	250.5	236.7	215.0	164.0	175.7	197.2	204.1	214.0
280.5	284.5	297.0	248.2	262.4	256.5	242.8	219.7	165.6	178.6	199.7	208.1	218.2
658.9	653.6	799.1	660.6	655.8	667.2	714.4	670.2	439.0	584.8	628.6	682.6	741.0
406.9	475.9	516.6	446.5	496.6	578.4	612.5	563.0	406.3	519.3	528.6	546.9	609.1
1,065.8	1,129.5	1,315.7	1,107.1	1,152.4	1,245.6	1,326.9	1,233.2	845.3	1,104.1	1,157.2	1,229.5	1,350.1
1,274.0	1,186.0	1,295.0	1,338.7	1,324.9	1,526.3	1,672.3	1,474.3	1,061.3	1,364.0	1,511.2	1,672.7	1,656.5
22.2	14.9	23.8	23.7	17.5	17.9	30.6	28.7	21.7	21.0	22.5	22.1	23.0
133.6	126.6	147.4	129.7	113.4	121.7	122.7	115.4	90.9	95.7	101.2	105.2	116.3
155.8	141.5	171.2	153.4	130.9	139.6	153.3	144.1	112.6	115.7	123.7	127.3	139.3
6.5	7.7	9.8	6.5	7.2	9.5	12.7	12.0	6.8	11.8	11.3	11.5	12.0
16.1	18.1	16.5	12.2	16.5	16.0	17.3	17.7	11.6	16.8	18.5	18.5	20.0
22.6	25.8	26.3	18.7	23.7	25.5	30.0	29.7	18.4	28.6	29.8	30.0	32.0
13.4	10.5	15.8	14.2	11.1	10.7	12.2	9.1	9.0	8.4	13.0	24.2	21.3
40.5	38.6	67.0	65.0	63.2	76.4	65.3	56.9	57.5	77.7	88.1	100.7	125.0
53.9	49.1	82.8	79.2	74.3	87.1	77.5	66.0	66.5	86.1	101.1	124.9	146.3

Sources: U.S. Department of the Interior, Bureau of Mines; U.S. Department of Commerce, Bureau of Industrial Development; CDA

(a) Preliminary.

(b) Ingot Makers consume refined copper, scrap copper, and alloying metal and ship copper alloy ingots to brass mills, foundries, powder plants, and other industries.

(c) Wire Mills consume refined copper only.

(d) Chemical, Steel, Aluminum and Other Industries.

Table 3, Items 4 to 11.

Consumption of alloying metal by ingot makers, brass mills, foundries and powder plants — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
Ingot Makers[(b)]							
Consumption of Zinc—Slab	9.4	12.9	10.9	7.8	8.6	7.4	9.4
Zinc in Scrap	26.0	24.9	26.9	29.2	31.3	33.0	35.2
Lead in Scrap	16.4	17.2	17.9	19.4	20.7	21.3	23.6
Tin in Scrap	12.3	13.2	13.8	14.3	15.3	15.7	17.2
Nickel in Scrap	.5	.5	.3	.6	.6	.7	1.0
Total	64.6	68.7	69.8	71.3	76.5	78.1	86.4
Brass Mills							
Consumption of Zinc—Slab	84.3	111.2	113.7	115.8	122.3	114.4	169.3
Zinc in Scrap	77.8	71.7	84.4	88.2	100.3	126.4	129.9
Lead—Refined	2.0	2.9	3.1	3.0	3.0	3.5	3.9
Lead in Scrap	3.0	2.9	3.6	4.1	4.6	5.2	5.3
Tin—Refined	.8	.9	.9	.9	1.0	1.2	1.5
Tin in Scrap	.1	.1	.1	.2	.3	.3	.4
Nickel—Refined	3.1	3.8	4.0	4.4	5.4	9.3	5.2
Nickel in Scrap	1.4	1.6	1.6	1.8	2.4	3.3	6.4
Total	172.5	195.1	211.4	218.4	239.3	263.6	321.9
Foundries							
Consumption of Zinc—Slab	4.7	4.1	4.9	4.0	3.3	3.1	3.4
Zinc in Scrap	5.1	3.8	3.7	4.0	4.6	4.3	4.4
Lead in Scrap	8.9	7.5	6.2	8.0	8.5	7.9	6.7
Tin in Scrap	3.5	3.0	2.4	2.7	2.9	2.7	2.4
Total	22.2	18.4	17.2	18.7	19.3	18.0	16.9
Powder Plants							
Consumption of Zinc—Slab	.6	.4	.3	.7	.9	2.0	3.5
Zinc in Scrap	1.8	2.3	2.6	2.5	2.4	1.9	.9
Tin—Refined	1.6	.9	1.3	1.8	.7	1.4	1.6
Total	4.0	3.6	4.2	5.0	4.0	5.3	6.0
Total Alloys	263.3	285.8	302.6	313.4	339.1	365.0	431.2

ALLOY CONTENT, thousands of short tons												
1967	1968	1969	19 '0	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
8.1	12.2	13.6	9.9	10.4	7.1	6.9	8.2	6.6	7.7	8.3	7.3	7.4
31.3	32.8	34.5	26.7	31.2	33.9	29.4	28.2	20.8	26.8	29.1	25.0	24.2
20.1	19.9	20.1	16.1	16.8	16.2	18.0	18.1	13.4	16.9	19.7	19.2	18.6
14.6	14.1	14.1	11.2	11.5	19.1	12.5	12.5	9.3	11.4	13.3	12.4	11.7
.9	.8	.9	.6	.7	.6	1.3	.7	.4	.4	.4	.4	.4
75.0	79.8	83.2	64.5	70.6	76.9	68.1	67.7	50.5	63.2	70.8	64.3	62.3
116.9	145.9	158.7	112.2	134.8	177.4	183.6	167.6	104.8	153.1	154.5	162.2	167.0
108.9	126.7	156.6	128.8	129.8	156.2	149.2	132.6	94.7	124.5	125.5	139.8	146.1
2.3	2.8	3.7	2.5	3.1	3.8	4.9	4.1	2.0	3.5	3.3	3.7	3.9
2.9	3.6	4.7	3.2	2.9	3.6	3.6	3.3	2.3	3.4	4.5	3.8	4.0
1.2	1.2	1.5	1.2	1.1	1.0	1.1	1.1	.6	.8	.7	.8	.9
.5	.5	.7	.5	.4	.5	.5	.5	.3	.3	.6	.5	.5
3.6	3.4	5.9	5.1	6.1	6.5	5.4	7.1	7.5	5.5	4.6	4.8	7.6
6.3	2.4	3.3	4.6	4.7	4.1	10.5	4.2	4.1	3.8	3.1	2.2	3.4
242.6	286.5	335.1	258.1	282.9	353.1	358.8	320.5	216.3	294.9	296.8	317.8	333.4
2.3	2.3	6.0	4.6	4.5	6.8	6.0	4.4	3.1	4.2	4.5	4.9	3.9
3.4	3.4	3.4	3.2	2.7	2.8	2.7	3.5	3.0	4.1	4.2	5.6	5.8
5.6	5.4	5.2	5.6	2.8	2.5	2.3	2.6	2.0	2.2	2.5	3.4	3.5
2.0	1.9	1.8	2.0	1.1	1.0	1.0	1.1	.9	.9	1.1	1.6	1.7
13.3	13.0	16.4	15.4	11.1	13.1	12.0	11.6	9.0	11.4	12.3	15.5	14.9
3.0	1.6	1.2	1.0	.7	.7	1.1	1.3	.8	1.2	1.6	1.6	1.6
.8	2.2	2.3	1.7	2.2	2.1	2.1	1.4	.9	1.5	1.1	1.4	1.1
1.4	1.6	1.3	1.0	1.1	1.0	1.2	1.0	.6	1.0	1.0	1.0	1.1
5.2	5.4	4.8	3.7	4.0	3.8	4.4	3.7	2.3	3.7	3.7	4.0	3.8
336.1	384.7	439.5	341.7	368.6	446.9	443.3	403.5	278.1	373.2	383.6	401.6	414.4

Sources: U. S. Department of the Interior, Bureau of Mines, CDA

(a) Preliminary

(b) Ingot makers consume refined copper, scrap copper, and alloying metal and ship copper alloy ingots to brass mills, foundries, powder plants, and other industries.

Table 3, Item 15.

Net consumption of metals by brass mills, wire mills, foundries, powder plants, and other industries — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
Net Metal Consumed (Table 3, Item 15)							
Metal Weight	2,315.4	2,426.8	2,629.6	2,848.4	3,075.4	3,324.3	3,742.4
Brass Mills (Table 3, Item 17)							
Copper (Copper Content)	818.4	908.4	978.8	1,063.7	1,149.6	1,232.1	1,425.4
Alloy (Alloy Content)	172.5	195.1	211.4	218.4	239.3	263.6	321.9
Brass Ingot (Metal Weight)	6.1	5.5	7.0	6.6	6.6	6.5	6.6
Total (Metal Weight)	997.0	1,109.0	1,197.2	1,288.7	1,395.5	1,502.2	1,753.9
Wire Mills (Table 3, Item 20)							
Copper (Copper Content)	841.0	835.0	935.0	1,027.0	1,111.0	1,228.0	1,376.0
Foundries (Table 3, Item 23)							
Copper (Copper Content)	140.5	128.1	140.1	154.3	164.7	164.9	165.4
Alloy (Alloy Content)	22.2	18.4	17.2	18.7	19.3	18.0	16.9
Brass Ingot (Metal Weight)	232.2	234.0	246.5	252.3	273.6	294.0	288.0
Total (Metal Weight)	394.9	380.5	403.8	425.3	457.6	476.9	470.3
Powder Plants (Table 3, Item 26)							
Copper (Copper Content)	16.4	17.5	19.7	20.7	23.9	25.3	28.4
Alloy (Alloy Content)	4.0	3.6	4.2	5.0	4.0	5.3	6.0
Brass Ingot (Metal Weight)	1.8	2.7	3.3	4.2	3.8	3.6	4.3
Total (Metal Weight)	22.2	23.8	27.2	29.9	31.7	34.2	38.7
Other Industries [b] (Table 3, Item 16)							
Copper (Copper Content)	34.4	50.7	50.9	48.5	55.1	55.9	60.4
Brass Ingot (Metal Weight)	25.9	27.8	15.5	29.0	24.5	27.1	43.1
Total (Metal Weight)	60.3	78.5	66.4	77.5	79.6	83.0	103.5

THOUSANDS OF SHORT TONS												
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
3,157.1	3,163.3	3,583.9	3,231.1	3,280.6	3,695.4	3,935.2	3,567.8	2,526.0	3,246.0	3,494.0	3,778.7	3,925.7
1,065.8	1,129.5	1,315.7	1,107.1	1,152.4	1,245.6	1,326.9	1,233.2	845.3	1,104.1	1,157.2	1,229.5	1,350.1
242.6	286.5	335.1	258.1	282.9	353.1	358.8	320.5	216.3	294.9	296.8	317.8	333.4
4.4	5.2	6.5	6.2	13.2	16.7	14.5	23.9	5.6	8.3	7.3	7.5	7.7
1,312.8	1,421.2	1,657.3	1,371.4	1,448.5	1,615.4	1,700.2	1,577.6	1,067.2	1,407.3	1,461.3	1,554.8	1,691.2
1,274.0	1,186.0	1,295.0	1,338.7	1,324.9	1,526.3	1,672.3	1,474.3	1,061.3	1,364.0	1,511.2	1,672.7	1,656.5
155.8	141.5	171.2	153.4	130.9	139.6	153.3	144.1	112.6	116.7	123.7	127.3	139.3
13.3	13.0	16.4	15.4	11.1	13.1	12.0	11.6	9.0	11.4	12.3	15.5	14.9
250.3	268.1	280.5	209.2	222.6	241.3	239.6	224.6	154.4	171.3	190.2	203.4	187.7
419.4	422.6	468.1	378.0	364.6	394.0	404.9	380.3	276.0	299.4	326.2	346.2	341.9
22.6	25.8	26.3	18.7	23.7	25.5	30.0	29.7	18.4	28.6	29.8	30.0	32.0
5.2	5.4	4.8	3.7	4.0	3.8	4.4	3.7	2.3	3.7	3.7	4.0	3.8
6.3	5.9	6.9	7.3	4.6	5.3	6.9	3.2	1.1	2.1	3.2	3.7	2.5
34.1	37.1	38.0	29.7	32.3	34.6	41.3	36.6	21.8	34.4	36.7	37.7	38.3
53.9	49.1	82.8	79.2	74.3	87.1	77.5	66.0	66.5	86.1	101.1	124.9	146.3
62.9	47.3	42.7	34.1	36.0	38.0	39.0	33.0	33.2	54.8	57.5	42.4	51.5
116.8	96.4	125.5	113.3	110.3	125.1	116.5	99.0	99.7	140.9	158.6	167.3	197.8

Sources: U. S. Department of the Interior, Bureau of Mines; CDA

(a) Preliminary

(b) Chemical, Steel, Aluminum, and Other Industries

Table 4

Supply of mill, foundry, and powder products and their consumption in the end-use markets — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
(1) Sheet, Strip and plate (page 32)[b]	656	707	784	809	923	1,021	1,314
(2) Rod, Bar and Mechanical Wire (page 32)[b]	640	675	755	773	880	963	1,041
(3) Plumbing Tube and Pipe (page 32)[b]	295	380	473	520	581	579	473
(4) Commercial Tube and Pipe (page32)[b]	289	303	344	362	402	414	497
(5) Total Brass Mill Products (page 32)[b]	1,880	2,065	2,356	2,464	2,786	2,977	3,325
(6) Bare Wire	176	173	165	171	201	207	269
(7) Communication Wire & Cable[c]	382	358	370	444	519	539	565
(8) Building Wire (9) Magnet Wire (10) Power Cable (11) Apparatus Wire and Cordage (12) Automotive Wire and Cable (exc. Magnet) (13) Other Insulated Wire and Cable	962	1,022	1,101	1,098	1,271	1,431	1,660
(14) Total Wire Mill Products[c,d]	1,520	1,553	1,636	1,713	1,991	2,177	2,494
(15) Sand Castings	683	657	721	767	799	793	769
(16) Permanent Mold Castings	43	38	40	40	42	45	58
(17) Die Castings	14	16	16	17	20	21	26
(18) Other Castings	22	23	29	28	30	30	57
(19) Total Foundry Casting Products	762	734	806	852	891	889	910
(20) Total Powder Products	39	41	48	51	57	62	67
(21) Domestic Products — Total[c]	4,201	4,393	4,846	5,080	5,725	6,105	6,796
(22) Net Imports (page 34)	133	66	67	81	127	127	232
(23) Products to Domestic Market — Total[c]*	4,334	4,459	4,913	5,161	5,852	6,232	7,028
(24) Building Construction[e]	1,239	1,341	1,518	1,608	1,796	1,895	1,995
(25) Transportation[e]	492	489	552	577	639	711	757
(26) Consumer and General Products[e]	579	622	658	679	796	873	1,166
(27) Industrial Machinery and Equipment[e]	1,005	1,002	1,099	1,141	1,267	1,304	1,455
(28) Electrical and Electronic Products[e]	1,019	1,005	1,086	1,156	1,354	1,449	1,655

*Markets include—Building Construction: Plumbing & Heating; Building Wiring; Air Conditioning & Commercial Refrigeration; Builders' Hardware; Architectural.

Transportation: Automobile; Truck & Bus; Railroad; Marine; Aircraft & Aerospace.

Consumer & General Products: Appliances; Fasteners & Closures; Military & Commercial Ordnance; Coinage; Utensils & Cutlery; Misc.

Industrial Machinery & Equipment; Heavy Industrial Equipment; Industrial Valves & Fittings; Heat Exchangers; Off-Highway Vehicles; Non-Electrical Instruments.

Electrical & Electronic Products: Telecommunications; Power Utilities; Lighting & Wiring Devices; Electronics (except Consumer).

METAL WEIGHT, millions of pounds												
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
1,007	1,033	1,147	883	964	1,074	1,192	1,079	853	1,006	1,014	1,062	1,115
781	900	1,016	804	881	1,038	1,131	1,005	651	904	973	1,020	1,051
399	400	433	378	447	463	519	347	310	374	439	459	483
409	423	514	448	417	441	475	398	265	323	330	368	408
2,596	2,756	3,110	2,513	2,709	3,016	3,317	2,829	2,079	2,607	2,756	2,909	3,057
235	242	245	226	218	270	209	219	167	198	233	239	233
543	534	716	735	803	766	873	799	584	687	836	908	917
			484	552	580	666	557	483	545	658	714	
			466	427	496	537	446	338	451	516	558	
			274	236	262	295	292	216	206	233	249	2,020
1,578	1,437	1,563	135	137	169	185	179	140	163	209	224	
			36	46	67	74	64	54	72	90	95	
			67	69	90	79	89	81	75	80	90	
2,356	2,213	2,524	2,423	2,488	2,700	2,918	2,645	2,063	2,397	2,855	3,077	3,170
671	658	711	620	597	654	667	566	447	491	524	511	527
54	55	56	49	46	39	33	30	19	15	19	22	31
20	25	24	22	20	23	23	18	10	10	8	7	7
54	53	62	60	42	47	57	57	44	33	29	27	27
799	791	853	751	705	763	780	671	520	549	580	567	592
56	62	61	47	52	54	64	69	46	65	63	65	66
5,807	5,822	6,548	5,734	5,954	6,533	7,079	6,214	4,708	5,618	6,254	6,618	6,885
177	261	129	132	170	212	178	93	57	222	193	282	163
5,984	6,083	6,677	5,866	6,124	6,745	7,257	6,307	4,765	5,840	6,447	6,900	7,048
1,632	1,639	1,808	1,634	1,812	2,015	2,179	1,735	1,382	1,707	1,942	2,092	2,151
594	652	720	588	678	761	886	733	585	835	909	889	874
1,077	1,122	1,137	880	859	994	991	961	772	798	820	947	1,003
1,260	1,281	1,377	1,223	1,178	1,313	1,398	1,229	880	1,051	1,137	1,227	1,234
1,421	1,389	1,635	1,541	1,597	1,662	1,803	1,649	1,146	1,449	1,639	1,745	1,786

Sources: U.S. Department of Commerce, Bureau of the Census, Bureau of Industrial Development; CDA

(a) Preliminary
(b) Revised Data, 1974 through 1978
(c) Revised Data, 1970 through 1978
(d) Copper Content
(e) Revised Data 1960 through 1978

Table 4, Item 5.

Supply of brass mill products — 1960-1979

	1960	1961	1962	1963	1964	1965	1966
Total Products — Metal Weight	1,880	2,065	2,356	2,464	2,786	2,977	3,325
Sheet, Strip and Plate	656	707	784	809	923	1,021	1,314
Copper	176	193	220	236	243	272	354
Copper Alloy	480	514	564	573	680	749	960
Rod, Bar and Mechanical Wire	640	675	755	773	880	963	1,041
Copper	101	97	107	110	135	152	161
Copper Alloy	539	578	648	663	745	811	880
Plumbing Tube and Pipe	295	380	473	520	581	579	473
Copper	273	352	445	489	547	548	448
Copper Alloy	22	28	28	31	34	31	25
Commercial Tube and Pipe	289	303	344	362	402	414	497
Copper	202	203	230	258	287	290	362
Copper Alloy	87	100	114	104	115	124	135

Supply of brass mill products in selected countries

	METAL WEIGHT, millions of pounds												
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
Canada	228	261	269	231	221	236	281	264	192	223	232	272	281
France	479	497	597	585	580	598	667	603	476	569	586	590	638
Germany, F.R.	780	968	1,103	1,067	986	1,130	1,311	1,157	932	1,219	1,207	1,219	1,337
Italy	437	453	479	527	494	572	626	654	520	647	639	652	609
Japan	929	1,030	1,160	1,201	1,152	1,330	1,682	1,298	1,148	1,546	1,573	1,722	1,875
Scandinavia	247	272	277	279	260	286	316	316	247	285	295	321	348
Spain	92	110	138	132	133	167	193	181	133	178	183	174	191
Switzerland	99	99	110	116	104	100	114	118	81	96	116	105	111
United Kingdom	924	1,019	1,035	956	842	905	1,004	903	737	803	827	845	797
United States	2,596	2,756	3,110	2,513	2,709	3,016	3,317	2,829	2,079	2,607	2,756	2,909	3,057

Sources: United States—U.S. Department of Commerce, Bureau of Industrial Development; CDA
Other Countries—World Bureau of Metal Statistics
(a) Preliminary

MILLONS OF POUNDS												
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
2,596	2,756	3,110	2,513	2,709	3,016	3,317	2,829	2,079	2,607	2,756	2,909	3,057
1,007	1,033	1,147	883	964	1,074	1,192	1,079	853	1,006	1,014	1,062	1,115
240	190	238	185	236	238	275	260	206	219	226	226	250
767	843	909	698	728	836	917	819	647	787	788	836	865
781	900	1,016	804	881	1,038	1,131	1,005	651	904	973	1,020	1,051
130	140	161	129	151	137	149	164	84	107	121	131	143
651	760	855	675	730	901	982	841	567	797	852	889	908
399	400	433	378	447	463	519	347	310	374	439	459	483
381	385	415	363	431	446	502	335	302	366	432	451	475
18	15	18	15	16	17	17	12	8	8	7	8	8
409	423	514	448	417	441	475	398	265	323	330	368	408
260	276	363	304	276	321	334	252	168	212	229	272	310
149	147	151	144	141	120	141	146	97	111	101	96	98

Sources: U.S. Department of Commerce, Bureau of Industrial Development; CDA
(a) Preliminary.

Table 4, Item 22.

Imports and exports of brass mill, wire mill, and powder products – 1960-1979

	1960	1961	1962	1963	1964	1965	1966
Net Imports – Metal Weight (Table 4, Item 22)	132.8	65.9	66.6	80.8	127.4	126.9	231.6
Imports – Metal Weight	177.8	115.3	119.7	130.4	177.2	191.6	289.8
Brass Mill Products – Metal Weight	153.1	105.3	109.9	120.0	145.2	150.6	248.1
Copper – Sheet, Strip and Plate	26.0	14.6	17.5	22.5	37.1	44.6	35.0
Rod, Bar and Mechanical Wire	–	–	–	–	3.6	2.6	5.2
Tube and Pipe	45.1	20.3	13.6	12.1	13.7	19.6	51.1
Copper Alloy – Sheet, Strip and Plate	26.2	25.3	28.8	30.1	29.6	30.0	63.8
Rod, Bar and Mechanical Wire	27.7	20.8	20.6	22.6	20.8	12.7	46.3
Tube and Pipe	28.1	24.3	29.4	32.7	40.4	41.1	46.7
Wire Mill Products	23.0	8.2	7.9	8.3	29.5	38.4	38.8
Copper – Rod	10.9	.5	.4	1.0	10.5	10.4	7.8
Copper – Bare and Insulated Wire	12.1	7.7	7.5	7.3	19.0	28.0	31.0
Powder Plant Products	1.7	1.8	1.9	2.1	2.5	2.6	2.9
Copper Alloy – Powder	1.7	1.8	1.9	2.1	2.5	2.6	2.9
Exports – Metal Weight	45.0	49.4	53.1	49.6	49.8	64.7	58.2
Brass Mill Products – Metal Weight	7.6	8.2	10.8	11.4	11.4	23.2	16.7
Copper – Sheet, Strip and Plate	1.0	.7	.7	.7	.8	2.3	1.6
Rod, Bar and Mechanical Wire	–	–	–	–	–	2.7	2.1
Tube and Pipe	1.5	1.9	1.8	2.3	2.9	1.7	1.1
Copper Alloy – Sheet, Strip and Plate	1.3	1.2	2.3	1.4	2.2	6.9	2.4
Rod, Bar and Mechanical Wire	1.8	1.8	2.5	2.7	2.7	5.8	5.7
Tube and Pipe	2.0	2.6	3.5	4.3	2.8	3.8	3.8
Wire Mill Products	36.7	40.3	41.3	37.1	37.4	39.6	39.3
Copper – Rod	10.4	14.7	13.5	11.6	8.9	8.9	10.1
Copper – Bare Wire	6.6	4.0	5.7	6.3	10.4	7.0	6.3
Copper – Insulated Wire	19.7	21.6	22.1	19.2	18.1	23.7	22.9
Powder Plant Products	.7	.9	1.0	1.1	1.0	1.9	2.2
Copper Alloy – Powder	.7	.9	1.0	1.1	1.0	1.9	2.2

MILLIONS OF POUNDS												
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[a]
177.2	260.8	128.6	131.8	169.8	212.4	178.2	92.5	57.3	222.3	192.8	281.9	162.9
235.3	312.1	195.3	204.7	251.6	300.4	311.0	259.3	196.9	356.1	361.8	495.1	436.7
202.2	267.6	168.1	165.0	219.2	265.7	266.4	202.8	164.4	300.1	306.8	434.6	375.1
41.9	77.5	30.9	26.9	38.7	45.7	48.7	46.9	37.8	59.9	64.7	85.8	79.8
2.8	8.7	1.4	3.5	4.1	6.1	6.0	6.7	4.2	6.6	8.0	17.5	16.9
31.5	48.7	31.4	36.4	43.1	51.6	55.0	31.3	24.3	33.7	39.9	46.3	44.8
59.8	64.6	45.5	47.8	74.4	92.4	84.9	57.2	51.4	104.6	105.7	155.4	123.5
29.9	17.7	14.0	10.1	11.3	16.8	23.6	20.3	14 3	48.0	41.3	60.1	55.7
36.3	50.4	44.9	40.3	47.6	53.1	48.2	40.4	32.4	47.3	47.2	69.5	54.4
30.1	41.0	24.4	37.4	30.0	32.0	42.3	54.8	30.9	53.4	52.6	58.0	59.2
6.1	13.0	2.4	2.4	3.0	3.0	5.3	2.8	1.5	2.5	13.8	7.0	6.0
24.0	28.0	22.0	35.0	27.0	29.0	37.0	52.0	29.4	50.9	38.8	51.0	53.2
3.0	3.5	2.8	2.3	2.4	2.7	2.3	1.7	1.6	2.6	2.4	2.5	2.4
3.0	3.5	2.8	2.3	2.4	2.7	2.3	1.7	1.6	2.6	2.4	2.5	2.4
58.1	51.3	66.7	72.9	81.8	88.0	132.8	166.8	139.6	133.8	169.0	213.2	273.8
16.6	16.0	21.8	27.1	30.6	33.6	68.6	87.8	53.4	48.6	48.6	59.5	96.9
1.8	1.7	3.2	3.3	1.5	.9	1.8	2.2	0.8	1.4	4.2	2.9	3.3
.7	2.2	2.0	3.7	1.0	1.8	4.4	2.7	8.1	1.4	2.6	3.6	8.1
1.5	1.2	1.9	2.1	2.5	2.3	15.5	13.5	4.4	5.1	6.2	5.8	18.8
2.2	2.4	4.6	4.5	4.2	7.7	12.2	14.5	6.4	8.3	8.6	9.0	10.4
6.2	5.4	6.6	10.2	16.3	16.8	21.0	38.8	20.5	20.0	20.0	26.2	23.4
4.2	3.1	3.5	3.3	5.1	4.1	13.7	16.1	13.2	12.4	7.0	12.0	32.9
39.5	33.0	41.4	42.8	47.3	50.7	59.2	73.6	83.7	81.5	116.9	149.9	173.0
10.4	5.4	7.2	8.3	14.6	10.9	10.4	14.0	10.9	8.5	11.2	15.4	34.8
8.8	4.1	8.1	4.2	2.9	4.3	7.7	4.4	3.2	6.2	7.2	10.9	13.1
20.3	23.5	26.1	30.3	29.8	35.5	41.1	55.2	69.6	66.8	98.5	123.6	125.1
2.0	2.3	3.5	3.0	3.9	3.7	5.0	5.4	2.5	3.7	3.5	3.8	3.9
2.0	2.3	3.5	3.0	3.9	3.7	5.0	5.4	2.5	3.7	3.5	3.8	3.9

Sources: U.S. Department of Commerce, Bureau of the Census; CDA

(a) Preliminary